

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 3, line 3 with the following amended paragraph:

“The present invention extends the use of nonlattice matched quantum wells by extending the composition range over which they are mechanically stable. This is done by introducing thin regions, or mechanical stabilizers in the quantum well region, with the same lattice constant as the substrate while using ~~then~~ thin layers of a semiconductor alloy of a different lattice constant in the quantum well structure. Alternatively, the lattice constant of the mechanical stabilizers may be nearly, e.g. about $\pm 2\%$, the same as that of the substrate, or mismatched in the opposite direction of the remainder of the quantum well material. The mechanical stabilizers are thin enough that their effect on the quantum well energy levels is small enough to be conveniently compensated for by modifying the composition, i.e. the indium to gallium ratio of the InGaAs layers or the arsenic to antimony ratio of GaAsSb or a combination of the above in InGaAsSb. A series of mechanical stabilizers is created within the quantum well structure. The effective quantum well energy level is that from the whole series of quantum well structures with mechanical stabilization layers therein. The effective quantum well energy level is modified only slightly by the presence of the mechanical stabilizers.”

The purpose of this amendment is to correct a typographical error. No new matter is believed to be entered as a result of this amendment to the specification.